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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,015	04/08/2004	Kazuhiro Abe	086142-0665	8588

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EXAMINER

MCCREARY, LEONARD

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/820,015		ABE, KAZUHIRO	
	<b>Examiner</b>		<b>Art Unit</b>	
	Leonard J. McCreary, Jr.		3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 recites the limitation "the at least four above zone regions" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9-13, and 15-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,106,003 to Rahmstorf et al. in view of US 2003/0189321 to Takahashi. Rahmstorf discloses an interior trim panel for motor vehicles fitted with an airbag comprising the following:

- a. A protection device comprising: an airbag 9' arranged inside a member disposed in front of a seat; a gas generator 9 for inflating the airbag; and a cover

1 covering the airbag and configured to open when the airbag is inflated, wherein the cover is configured to break along tear lines 13 when the airbag is inflated to form a plurality of laterally arranged flaps (defined by 13") when the airbag is inflated (claim 1.)

b. The tear lines are positioned so that at least four laterally arranged flaps are formed (Fig. 4) (claim 2.)

c. The tear lines are positioned so that at least one flap opens upward and at least one flap opens downward (Fig. 4) (claim 3.)

d. A breakable cover 1 for an airbag configured to deploy into a position, wherein the cover comprises a tear line 13 positioned so that when the cover breaks as a result of the inflation of the airbag a first portion of the cover rotates upward and a second portion of the cover rotates downward (Fig. 4) (claim 4.)

e. The first portion of the cover includes a plurality of flaps (Fig. 4) (claim 5.)

f. The second portion of the cover includes a plurality of flaps (Fig. 4) (claim 6.)

g. The tear line includes a plurality of vertical sections (Fig. 4) (claim 9.)

h. An airbag module comprising an airbag 9' and a frangible cover 1 overlying the airbag, wherein the cover includes a tear line 13 and a hinge portion positioned so that cover breaks a first portion of the cover rotates upward and a second portion of the cover rotates downward (Fig. 4) (claim 10.)

i. The first portion of the cover includes a plurality of flaps (Fig. 4) (claim 11.)

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j. The cover includes additional tear lines positioned in the first portion of the cover to form the plurality of flaps (Fig. 4) (claim 12.)

k. The additional tear lines are parallel (Fig. 4) (claim 13.)

2. Rahmstorf does not teach the details of hinge portions. Takahashi discloses and airbag cover and teaches:

l. Each of the flaps are provided with a hinge portion formed in the cover, each flap rotates about its respective hinge portion, and wherein each hinge portion is formed as a linear concave groove 26 (fig. 1) (claims 1, 4.)

m. The hinge portion is formed as a plurality of linear concave grooves 84 (figs. 23A-F) (claim 10.)

n. The depth of the hinge portion is less than a depth of the tear lines (fig. 1) (claims 15, 16, 17.)

3. Re claims 1, 4, and 10, it would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the interior trim panel of Rahmstorf to include a hinge formed as a linear groove as taught by Takahashi so as to allow the cover flaps to rotate out of the airbag deployment path along a predetermined line (para [0123].) Re claims 15-17, it would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the interior trim panel of Rahmstorf to include a hinge portion having a depth less than the depth of the tear lines as taught by Takahashi so as to ensure that upon airbag deployment the hinge stress is less than the tear line stress, which would reduce the likelihood of hinge failure.

4. Claims 1-12 and 14-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,550,803 to Derrick in view of US 2003/0189321 to Takahashi. Derrick discloses a covering for an airbag of an occupant restraint system comprising the following:

- o. A protection device comprising: an airbag arranged inside a member disposed in front of a seat; a gas generator for inflating the airbag; and a cover 10 covering the airbag and configured to open when the airbag is inflated, wherein the cover is configured to break along tear lines 12-19 when the airbag is inflated to form a plurality of laterally arranged flaps when the airbag is inflated (Fig. 2) (claim 1.)
- p. The tear lines are positioned so that at least four laterally arranged flaps are formed (Fig. 2) (claim 2.)
- q. The tear lines are positioned so that at least one flap opens upward and at least one flap opens downward (Fig. 2) (claim 3.)
- r. A breakable cover for an airbag configured to deploy into a position for protecting an occupant of a vehicle seat, wherein the cover comprises a tear line 12-19 positioned so that when the cover breaks as a result of the inflation of the airbag a first portion of the cover rotates upward and a second portion of the cover rotates downward (Fig. 2) (claim 4.)
- s. The first portion of the cover includes a plurality of flaps (Fig. 2) (claim 5.)
- t. The second portion of the cover includes a plurality of flaps (Fig. 2) (claim 6.)

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- u. The tear line is positioned so that when the cover breaks a third portion of the cover rotates laterally (Fig. 2) (claim 7.)
  - v. The third portion of the cover includes a plurality of flaps (Fig. 2) (claim 8.)
  - w. The tear line includes a plurality of vertical sections (Fig. 2) (claim 9.)
  - x. An airbag module for protecting a vehicle occupant comprising an airbag and a frangible cover 10 overlying the airbag, wherein the cover includes a tear line 12-19 and a hinge portion positioned so that cover breaks a first portion of the cover rotates upward and a second portion of the cover rotates downward (Fig. 2) (claim 10.)
  - y. The first portion of the cover includes a plurality of flaps (Fig. 2) (claim 11.)
  - z. The cover includes additional tear lines positioned in the first portion of the cover to form the plurality of flaps (Fig. 2) (claim 12.)
  - aa. The cover is configured to break into the first portion, the second portion and a third portion, wherein the third portion is configured to rotate laterally in a direction generally orthogonal to the vertical direction (Fig. 2) (claim 14.)
  - bb. The tear lines are positioned so that the cover is divided into eight or more zones, with at least four above zones and at least four below zone regions (Fig. 2) (claim 18.)
5. Derrik does not teach the details of hinge portions. Takahashi discloses and airbag cover and teaches:

cc. Each of the flaps are provided with a hinge portion formed in the cover, each flap rotates about its respective hinge portion, and wherein each hinge portion is formed as a linear concave groove 26 (fig. 1) (claims 1, 4.)

dd. The hinge portion is formed as a plurality of linear concave grooves 84 (figs. 23A-F) (claim 10.)

ee. The depth of the hinge portion is less than a depth of the tear lines (fig. 1) (claims 15, 16, 17.)

6. Re claims 1, 4, and 10, it would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the airbag cover of Derrick to include a hinge formed as a linear groove as taught by Takahashi so as to allow the cover flaps to rotate out of the airbag deployment path along a predetermined line (para [0123].)

Re claims 15-17, it would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the interior trim panel of Rahmstorf to include a hinge portion having a depth less than the depth of the tear lines as taught by Takahashi so as to ensure that upon airbag deployment the hinge stress is less than the tear line stress, which would reduce the likelihood of hinge failure.

7. Claim 19 stands rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,550,803 to Derrick in view of US 2003/0189321 to Takahashi as applied to claim 1, and further in view of US 2002/0195800 to Florsheimer. The disclosure of Derrick is discussed above. Derrick does not disclose at least four above zone regions rotate



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upwards and at least four below zone regions rotate downwards. Florsheimer discloses and airbag module with a cover and teaches:

ff. When the cover 4 breaks open, at least four above zone regions rotate upwards and at least four below zone regions rotate downwards (Figs. 1-3) (claim 19.)

8. It would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the airbag cover of Derrick to include at least four above zone regions rotating upwards and at least four below zone regions rotating downwards as taught by Florsheimer so as to reduce the amount of force required to tear the cover open (para [0003].)

9. Re claims 1, 4, and 10, the recitations "leg protection device" and "for protecting the legs of a vehicle occupant" have not been given patentable weight because it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987.) Further, it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951.) Rahmstorf and Derrick teach both apparatuses are for use in vehicle interiors to

restrain the occupant during a collision, which also encompasses the occupants' lower extremities.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leonard J. McCreary, Jr.  
Examiner  
Art Unit 3616

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**DAVID R. DUNN**  
**PRIMARY EXAMINER**